

The Sonoma County *Ludwigia* Task Force

cat has originated

RWQCB
REGION 1

36

24 February 2005

FEB 25 2005

<input checked="" type="checkbox"/> CK	<input type="checkbox"/> FCR	<input type="checkbox"/>
<input checked="" type="checkbox"/> RL	<input type="checkbox"/> LGR	<input type="checkbox"/> KAD
<input type="checkbox"/> NPO	<input type="checkbox"/> RSG	<input type="checkbox"/> EJI

JLS

569

To: Catherine Kuhlman, Executive Officer
North Coast Regional Water Quality Control Board
5550 Skylane Boulevard, Suite A, Santa Rosa, CA 95403

From: The Sonoma County *Ludwigia* Task Force

Re: The development of a pollution control plan (TMDL) for the Laguna de Santa Rosa waterbody to support control of invasive aquatic plant species

CC: Members of the Sonoma County *Ludwigia* Task Force; Sonoma County Board of Supervisors; City Councils of Santa Rosa, Rohnert Park, Sebastopol and Cotati

Dear Ms. Kuhlman,

On behalf of the Sonoma County *Ludwigia* Task Force (Task Force), I would like to formally express our support for the expedited development of a Laguna de Santa Rosa pollution control plan by the North Coast Regional Water Quality Control Board (NCRWQCB). As a group, the Task Force is specifically involved in combating an invasion of the aquatic weed, *Ludwigia hexapetala* (*Ludwigia*), that infests more than 150 acres of wetlands and waterways in Sonoma County. The Laguna de Santa Rosa (Laguna) watershed, where the worst infestations occur, drains the Santa Rosa plain, with more than 200,000 urban and rural residents. This weed threatens public and environmental health in Sonoma County by providing protective habitat for mosquito vectors of West Nile Virus, and by degrading wetlands and clogging waterways. *Ludwigia's* cumulative effects are likely to have large negative impacts on Sonoma County's citizens and economy. We believe that water pollution, in the form of high nutrient and sediment levels, contributes to these problems.

The Laguna de Santa Rosa has been listed by the U.S. Environmental Protection Agency as impaired for excess nitrogen, phosphorus, sediment, and temperature, and for low dissolved oxygen. While such conditions directly degrade the beneficial uses of these waters, high nutrient and sediment inputs are also likely to enhance the growth rates of invasive aquatic plants, like *Ludwigia*. Preliminary experimental data suggests that reducing nutrient levels in the Laguna will increase our ability to manage *Ludwigia* infestations. For these reasons, the Task Force strongly recommends that the NCRWQCB move swiftly to develop a pollution control plan for the Laguna.

The Total Maximum Daily Load (TMDL) pollution control plan process leads to a "pollution budget", designed to restore the health of a polluted body of water. The Laguna de Santa Rosa is strongly in need of such an effort for both nutrient and sediment impairments. There is currently no systematic, quantitative assessment of water quality problems or

The Sonoma County *Ludwigia* Task Force

contributing sources of pollution in the Laguna. As such, there is no quantitative and equitable basis for determining the pollutant load reductions and control actions needed to restore and protect the beneficial uses of the Laguna, and its downstream contribution to the Russian River.

The Task Force recognizes that rigorous TMDL plans require time to develop and implement, when nutrient and sediment loads are substantially reduced. However, throughout its development process, *Ludwigia* will continue to be a serious management problem with negative impacts to public health, the local environment and economy. For these reasons, the Task Force strongly recommends that the NCRWQCB initiate its TMDL process as soon as possible.

Sincerely yours,



Anna L. W. Sears, Ph.D.; Coordinator, Sonoma County *Ludwigia* Task Force
Research Director, Laguna de Santa Rosa Foundation
50 Old Courthouse Square, Santa Rosa CA 95404

At the consensus request of the Sonoma County *Ludwigia* Task Force, meeting February 11, 2005. Members in attendance:

Allan Buckmann; Wildlife Biologist, California Department of Fish and Game
Dick Butler; Team Leader, National Marine Fisheries Service
Denise Cadman; Natural Resource Specialist, City of Santa Rosa
Gene Cooley; Botanist, California Department of Fish and Game
Bill Cox; Fisheries Biologist, California Department of Fish and Game
Emily Dean; Permit Specialist, Sonoma County Water Agency
Brenda Grewell, Ph.D.; Plant Ecologist, USDA Agricultural Research Service
Erik Hawk; Vector Ecologist, Mosquito Vector Control District
Andrew Jensen; Environmental Scientist, RWQCB
Ron Keith; Entomologist, Mosquito Vector Control District
Piper Kimball; Vector Ecologist, Mosquito Vector Control District
Chris Kjeldsen, Ph.D.; Aquatic Botanist, Sonoma State University Emeritus Faculty
Chuck Krause; Operations Manager, Mosquito and Vector Control District
Dan Logan; Fisheries Biologist, National Marine Fisheries Service
Bruce MacArthur; Deputy Ag. Commissioner, Sonoma County Agricultural Commission
Jake MacKenzie, Ph.D.; City of Rohnert Park, Aquatic Botanist, retired EPA regulator
Jim Raisner; Agricultural Biologist, Sonoma County Agricultural Commission
Mike Reilly; Fifth District Supervisor, Sonoma County Board of Supervisors
Anna Sears; Research Director, Laguna de Santa Rosa Foundation
Joel Trumbo; Pesticide Use Coordinator, California Department of Fish and Game
Lily Verdone; Plant Ecologist, Biology Master's program, Sonoma State University
Jim Wanderscheid; Manager, Marin/Sonoma Mosquito and Vector Control District

Press Coverage of invasive *Ludwigia* in the Laguna: 2003-2005

Santa Rosa Press Democrat	OFFICIALS: LAGUNA STILL UNHEALTHY (Article)	11/15/05
Sonoma West Times & News	CITY PROTESTS POLLUTION DE-LISTING FOR LAGUNA (Article)	11/17/05
Santa Rosa Press Democrat	ROUND 2: MACHINES ENTER LUDWIGIA ASSAULT (Article)	8/23/05
Sonoma West Times & News	COUNCIL KEEN TO DECIDE FATE OF WEEDS (Article)	8/17/05
Santa Rosa Press Democrat	WEST NILE BATTLED BY HELICOPTER: PELLETS DROPPED IN RP, LAGUNA DE SR TO TRY TO CURB RISING MOSQUITO POPULATION (Article)	8/2/05
Santa Rosa Press Democrat	TOXIC STEW (LTE)	7/28/05
Santa Rosa Press Democrat	SAFETY OF LAGUNA SPRAYING DEFENDED: GOVERNMENT AGENCIES, WHO SAY CHEMICAL LESS TOXIC THAN COFFEE (Article)	7/22/05
Santa Rosa Press Democrat	NO SPRAY: RESTORATION WILL HELP PREVENT FUTURE HERBICIDE USE AT LAGUNA (Editorial)	7/21/05
Santa Rosa Press Democrat	FUNDS FOR LUDWIGIA PLAN APPROVED (Article)	7/20/05
Sonoma West Times & News	SPRAYING STARTS IN WEED-CHOKED LAGUNA (Article)	7/20/05
Santa Rosa Press Democrat	LAGUNA SPRAYING BEGINS (Article)	7/19/05
Santa Rosa Press Democrat	LAGUNA HERBICIDE SPRAYING TO BEGIN: PLAN TO COMBAT WATER WEED SEEN AS WEST NILE THREAT STARTS IN NEXT FEW DAYS (Article)	7/15/05
Sonoma West Times & News	COMMENTARY: WASTEWATER WARS (OP ED)	6/23/05
Santa Rosa Press Democrat	SR TO GIVE \$450,000 TO BATTLE LUDWIGIA: CITY TO PAY FOR ABOUT A THIRD OF COST OF PROGRAM TO FIGHT WATER WEED, MOSQUITOES (Article)	5/21/05
Sonoma West Times & News	LUDWIGIA ECO-ETHICS DEBATE: TO SPRAY OR NOT TO SPRAY IN THE LAGUNA? (Article)	5/18/05
Santa Rosa Press Democrat	LOW IMPACT (LTE)	5/17/05
Santa Rosa Press Democrat	WEST NILE: SPRAYING IS BEST OPTION FOR PROTECTING PUBLIC HEALTH (Editorial)	5/14/05
Santa Rosa Press Democrat	NEIGHBORHOODS MAY BE SPRAYED TO KILL MOSQUITOS, OFFICIALS SAY (Article)	5/13/05
Santa Rosa Press Democrat	LUDWIGIA CONTROL (LTE)	5/9/05
Santa Rosa Press Democrat	FOR THE RECORD (LTE)	4/30/05
Santa Rosa Press Democrat	IMPRESSIVE EXPERTISE (LTE)	4/29/05
Santa Rosa Press Democrat	A KIND OF CANCER (LTE)	4/28/05
Sonoma West Times & News	LAGUNA SPRAY FOES OPPOSE LUDWIGIA PLAN (Article)	4/27/05
Santa Rosa Press Democrat	CURING THE WATERS (LTE)	4/26/05
Santa Rosa Press Democrat	RESTORING THE LAGUNA'S HEALTH CLOSE TO HOME (OP ED)	4/20/05
Sonoma West Times & News	LETTER: THE WAR AGAINST NATURE (LTE)	4/20/05

Sonoma West Times & News	LUDWIGIA TASK FORCE SETS PUBLIC MEETING ON LAGUNA SPRAYING PLAN (Article)	4/13/05
Sonoma West Times & News	SEBASTOPOL BALKS AT PLAN TO SPRAY LAGUNA FOR WEED (Article)	4/13/05
Santa Rosa Press Democrat	WEST NILE: THIS YEAR, THAT BUZZING NOISE IS MORE THAN AN ANNOYANCE (Editorial)	3/26/05
Santa Rosa Press Democrat	HERBICIDE FIRST STEP TO ERADICATE LUDWIGIA (Article)	3/14/05
Sonoma West Times & News	CITY BALKS AT COST TO SPRAY FOR LUDWIGIA (Article)	3/10/05
Sonoma West Times & News	LUDWIGIA PLAN CALLS FOR AGGRESSIVE ACTION (Article)	1/27/05
Santa Rosa Press Democrat	BIOLOGIST BUILDS CONSENSUS TO FIGHT WATERWEED (Article)	1/17/05
Santa Rosa Press Democrat	LAWSUITS TARGET SEWAGE DISTRICTS (Article)	1/16/05
Santa Rosa Press Democrat	IMAGES OF A YEAR: SOME SIGNIFICANT MOMENTS OF 2004 AS SEEN BY PRESS DEMOCRAT PHOTOGRAPHERS (Article)	1/2/05
Sonoma West Times & News	COUNTY OKS HERBICIDE SPRAYING FOR LUDWIGIA (Article)	11/10/04
Santa Rosa Press Democrat	ENVIRONMENTALISTS BACK PLAN TO SPRAY LUDWIGIA (Article)	10/22/04
Santa Rosa Press Democrat	LONG OVERDUE: LUDWIGIA TASK FORCE MAKES RIGHT (Editorial)	10/22/04
Santa Rosa Press Democrat	WEED KILLER URGED FOR LAGUNA (Article)	10/21/04
Santa Rosa Press Democrat	NATURAL SOLUTION? (LTE)	10/5/04
Santa Rosa Press Democrat	NO GUTS: LOCAL AGENCIES' SPINELESS RESPONSE TO POTENTIAL PUBLIC HEALTH CRISIS (Editorial)	9/27/04
Santa Rosa Press Democrat	STATE AID SOUGHT TO FIGHT LUDWIGIA (Article)	9/24/04
Santa Rosa Press Democrat	RP CASINO WASTEWATER MIGHT GO INTO LAGUNA (Article)	9/23/04
Santa Rosa Press Democrat	WATERWAYS ARE CHOKING ON EVIL WEED (Column)	9/20/04
Santa Rosa Press Democrat	LAGUNA HEALTH: LUDWIGIA THREATENS HUMANS -- AND A FRAGILE ECOSYSTEM (Editorial)	9/18/04
Santa Rosa Press Democrat	WATER WEED SPREADS IN COUNTY (Article)	9/17/04
Sonoma West Times & News	HEALTH OF THE LAGUNA HAS TO IMPROVE - OR ELSE (Article)	7/28/04
Sonoma West Times & News	MOSQUITO ABATEMENT HOPED TO SLOW WEST NILE VIRUS (Article)	7/28/04
Sonoma West Times & News	EDITORIAL: LAGUNA S HEALTH (Editorial)	7/28/04
Santa Rosa Press Democrat	REGION BRACES FOR WEST NILE VIRUS (Article)	7/4/04
Santa Rosa Press Democrat	WEST NILE VIRUS DRAWING CLOSER TO NORTH COAST (Article)	5/20/04
Santa Rosa Press Democrat	IT'S BACK: LIKE UNINVITED GUESTS, LUDWIGIA REFUSES TO STAY AWAY (Editorial)	5/17/04
Santa Rosa Press Democrat	INVASIVE WEED FLOURISHING IN LAGUNA DE SANTA ROSA (Article)	5/14/04
Sonoma West Times & News	COMMENTARY: LAGUNA SPRAY RISKS AND MISCONCEPTIONS (OP ED)	11/25/03
Santa Rosa Press Democrat	PUBLIC HEALTH ISSUE	11/15/03
Santa Rosa Press Democrat	PLAN TO COUNTER WEST NILE THREAT (Article)	10/29/03

Santa Rosa Press Democrat	LAGUNA HELP (Editorial)	10/27/03
Santa Rosa Press Democrat	LAGUNA HERBICIDE SPRAYING ON SHELF (Article)	10/24/03
Santa Rosa Press Democrat	LAGUNA WORK ON FAST TRACK (Article)	10/11/03
Santa Rosa Press Democrat	PLANTS GONE WILD (Editorial)	10/11/03
Sonoma West Times & News	LAGUNA STILL PLAGUED WITH EXPLOSION OF INVASIVE PLANTS (Article)	10/10/03
Santa Rosa Press Democrat	LAGUNA RX (Editorial)	9/28/03
Santa Rosa Press Democrat	AGENCIES MAY USE HERBICIDE ON LAGUNA (Article)	9/27/03
Santa Rosa Press Democrat	LAGUNA MOSQUITO SPRAYING SUCCESSFUL (Article)	9/20/03
Santa Rosa Press Democrat	WEEDS ENTANGLE WEST NILE CAMPAIGN (Article)	9/13/03
Santa Rosa Press Democrat	LAGUNA TO BE SPRAYED FOR MOSQUITOES AGAIN (Article)	9/6/03
Santa Rosa Press Democrat	LAGUNA MAY NEED SECOND SPRAYING (Article)	8/30/03
Santa Rosa Press Democrat	LAGUNA SPRAYING (LTE)	8/29/03
Santa Rosa Press Democrat	OUCH! (Article)	8/25/03
Santa Rosa Press Democrat	WEST NILE VIGILANCE INTENSIFIES (Article)	8/22/03
Santa Rosa Press Democrat	WEEK WILL TELL EFFECTS OF SPRAYING (Article)	8/13/03
Santa Rosa Press Democrat	LAGUNA MOSQUITO SPRAYING SET TODAY (Article)	8/12/03
Sonoma West Times & News	COMMENTARY: DEADLY THREAT OF WEST NILE VIRUS IN LAGUNA (OP ED)	6/26/03
Santa Rosa Press Democrat	DREDGE LAGUNA TO AVOID WEST NILE TIME BOMB (OP ED)	6/19/03
Santa Rosa Press Democrat	WATER WEED, MOSQUITO LINK TO BE STUDIED IN LAGUNA (Article)	4/24/03
Sonoma West Times & News	LETTERS: LAGUNA MOSQUITOES (LTE)	1/27/03
Sonoma West Times & News	LAGUNA MOSQUITOES RAISE DISEASE WORRIES (Article)	1/20/03